ANSWER KEY FOR MOCK TEST- 15 (FOR 2020 ASPIRANTS) (05th May 2020)

1. (2)	2. (4)	3. (3)	4. (4)	5. (2)
6. (3)	7. (4)	8. (1)	9. (4)	10. (1)
11. (2)	12. (4)	13. (4)	14. (1)	15. (4)
16. (3)	17. (1)	18. (4)	19. (2)	20. (3)
21. (4)	22. (1)	23. (1)	24. (1)	25. (3)
26. (4)	27. (3)	28. (4)	29. (1)	30. (4)
31. (4)	32. (4)	33. (3)	34. (4)	35. (1)
36. (1)	37. (1)	38. (3)	39. (3)	40. (4)
41. (4)	42. (4)	43. (1)	44. (2)	45. (1)
46. (4)	47. (1)	48. (4)	49. (4)	50. (1)
51. (4)	52. (4)	53. (1)	54. (1)	55. (3)
56. (1)	57. (1)	58. (4)	59. (3)	60. (2)
61. (4)	62. (3)	63. (2)	64. (2)	65. (1)
66. (4)	67. (1)	68. (4)	69. (1)	70. (1)
71. (3)	72. (3)	73. (2)	74. (1)	75. (2)
76. (1)	77. (Bonus)	78. (1)	79. (1)	80. (3)
81. (4)	82. (2)	83. (4)	84. (1)	85. (2)
86. (2)	87. (2)	88. (4)	89. (3)	90. (3)
91. (2)	92. (4)	93. (4)	94. (2)	95. (2)
96. (1)	97. (1)	98. (2)	99. (4)	100. (2)
101. (1)	102. (4)	103. (1)	104. (1)	105. (1)
106. (4)	107. (3)	108. (1)	109. (3)	110. (1)
111. (4)	112. (4)	113. (4)	114. (1)	115. (3)
116. (4)	117. (3)	118. (4)	119. (4)	120. (2)
121. (2)	122. (2)	123. (1)	124. (3)	125. (3)
126. (2)	127. (3)	128. (3)	129. (2)	130. (1)
131. (3)	132. (2)	133. (3)	134. (4)	135. (4)
136. (1)	137. (1)	138. (2)	139. (1)	140. (3)
141. (2)	142. (1)	143. (1)	144. (3)	145. (2)
146. (4)	147. (2)	148. (1)	149. (3)	150. (4)
151. (1)	152. (1)	153. (4)	154. (3)	155. (3)
156. (2)	157. (4)	158. (1)	159. (1)	160. (1)
161. (4)	162. (1)	163. (1)	164. (3)	165. (1)
166. (3)	167. (4)	168. (3)	169. (1)	170. (2)
171. (2)	172. (1)	173. (4)	174. (1)	175. (1)
176. (4)	177. (2)	178. (1)	179. (3)	180. (1)

SOLUTIONS

1. (2)

Sol.

$x = 45\text{ m } 2\pi t, \quad y = 4\cos(2\pi t)$

Squiring and adding $x^2 + y^2 = 4^2 \quad \Rightarrow \quad R = 4$

$\Rightarrow$ Circular motion

$V = \omega R = (2\pi)(4) = 8\pi$

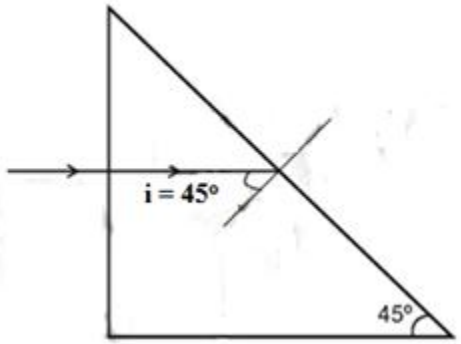
2. (4)

Sol.

E of x-ray E (100 ev to 100 kev)

3. (3)

Sol.



For TIR $i > i_c$ so $\sin i > \sin i_c$

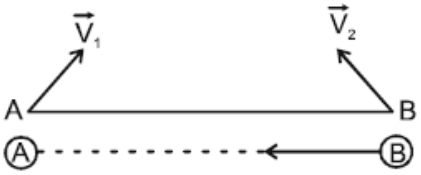
$\sin 45^\circ > \frac{1}{\mu} \quad \Rightarrow \quad \mu > \sqrt{2} \Rightarrow \quad \mu > 1.414$

Since μ of green and voilet are greater than 1.414 so they will total internal refrected. But red colour will be vetracted

So Ans. is (3)

4. (4)

Sol.



For collision $\vec{V}_{B/A}$ should be along $\overrightarrow{B \to A}$ $(\vec{r}_{A/B})$

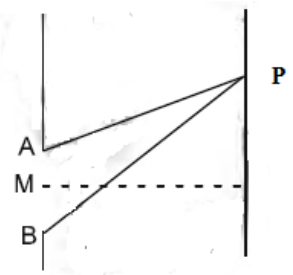
So, $\frac{\vec{V}_2 - \vec{V}_1}{|V_2 - V_1|} = \frac{\vec{r}_1 - \vec{r}_2}{|r_1 - r_2|}$

5. (2)

Sol.

For first minima

AP - BP = λ



$AP - MP = \frac{\lambda}{2}$

So phase difference = $\frac{2\pi}{\lambda} \times \frac{\lambda}{2} = \pi$

6. (3)

Sol.

$$R = \frac{mV}{qB} = \frac{\sqrt{2m(kE)}}{qB}$$

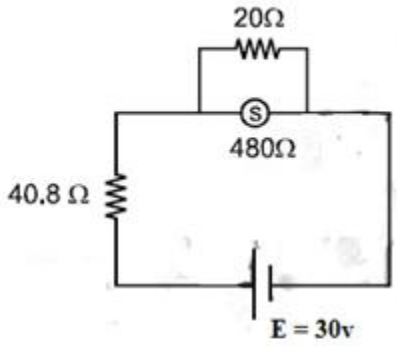
Since R is same so KE $\propto \frac{q^2}{m}$

So KE of α particle will be $\frac{(2)^2}{4}$ = same = 1 MeV

Ans. is (3)

7. (4)

Sol.



Resitance of ammeter = $\frac{480 \times 20}{480 + 20}$ = 19.2 Ω.

$i = \frac{30}{40.8 + 19.2} = 0.5$ A

8. (1)

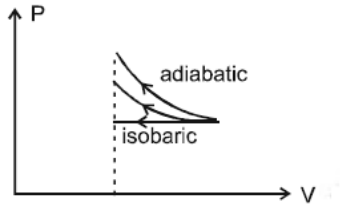
Sol.

$$\rho = \rho_0 (1 - \gamma \Delta t)$$

$$\frac{\Delta \rho}{\rho_0} = \gamma \Delta T = (5 \times 10^{-4})\,(40) = 0.02$$

9. (4)

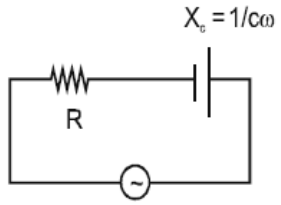
Sol.



Since area under the curve is max for adiabatic process so work done on the gas will be max for adiabatic process.

10. (1)

Sol.



$$i = \frac{v}{\sqrt{R^2 + \left(\frac{1}{c\omega}\right)^2}}$$

$$V_C = \frac{v}{\sqrt{R^2 + \left(\frac{1}{c\omega}\right)^2}} \times \left(\frac{1}{c\omega}\right)$$

$$V_C = \frac{V}{\sqrt{(Rc\omega)^2 + 1}}$$

If we fill a di-electric material

$C\uparrow \Rightarrow V_C \downarrow$

11. (2)

Sol.

$$KE_{max} = \frac{hc}{\lambda} - \psi$$

$$KE_{max} = \frac{1240}{500} - 2.82$$

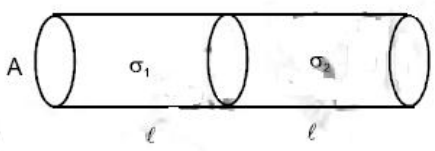
$$KE_{max} = 2.48 - 2.28 = 0.2 \text{ ev}$$

$$\lambda_{min} = \frac{h}{\sqrt{2m(KE)_{max}}} = \frac{\frac{20}{3} \times 10^{-34}}{\sqrt{2 \times 9 \times 10^{-31} \times 0.2 \times 1.6 \times 10^{-19}}}$$

$$\lambda_{min} = \frac{25}{9} \times 10^{-9} = 2.80 \times 10^{-9} \text{ nm} \qquad \text{so } \lambda \geq 2.8 \times 10^{-9} \text{ m}$$

12. (4)

Sol.



$$R_{eq} = \frac{\ell}{\sigma_1 A} + \frac{\ell}{\sigma_2 A} = \frac{\ell_{eq}}{\sigma_{eq} A_{eq}}$$

$$\frac{2\ell}{\sigma_{eq} A} = \frac{\ell}{A}\left(\frac{\sigma_1 + \sigma_2}{\sigma_1 \sigma_2}\right)$$

$$\sigma_{eq} = \frac{2\sigma_1\sigma_2}{\sigma_1 + \sigma_2}$$

13. (4)

Sol.

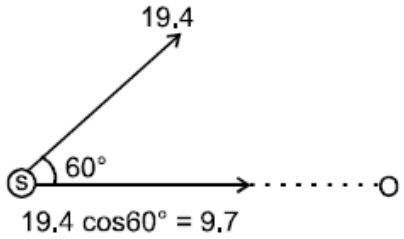
$$\omega_i = \frac{15}{0.45} = \frac{100}{3} \qquad \omega_f = 0$$

$$\omega_f = \omega_i + \alpha t$$

$$0 = \frac{100}{3} + (-\alpha)(15) \qquad \alpha = \frac{100}{45}$$

$$\tau = (I)(\alpha) = 3 \times \frac{100}{45} = 6.66 \text{ N.m.}$$

14. (1)



Sol.

$$f' = f_0\left(\frac{v - v}{v - v_s}\right)$$

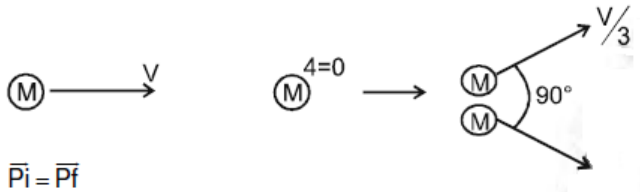
$$f' = 100\left(\frac{v - 0}{v - (+9.7)}\right)$$

$$f' = 100\left(\frac{v}{v\left(1 - \frac{9.7}{v}\right)}\right)$$

$$f' = 100\left(1 + \frac{9.7}{330}\right) = 103 \text{ Hz}$$

15. (4)

Sol.



$\overline{Pi} = \overline{Pf}$

$\Rightarrow |Pi| = |P_f| \Rightarrow = mV = \sqrt{\left(m\frac{V}{3}\right)^2 + (mV_2)^2}$ $\qquad V_2 = \frac{2\sqrt{2}}{3}V$

16. (3)

Sol.

$K.E. = \frac{1}{2} I \omega^2$

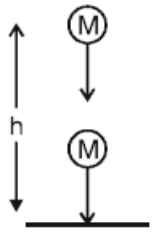
I is min. about the centre of mass

So. $(m_1)(x) = (m_2)(L-x)$

$x = \frac{m_2 L}{m_1 + m_2}$

17. (1)

Sol.



$\frac{KE_f}{KE_i} = \frac{1}{2}$

$\frac{V_f}{V_i} = \frac{1}{\sqrt{2}}$

$\frac{\sqrt{2gh}}{\sqrt{V_0^2 + 2gh}} = \frac{1}{\sqrt{2}}$

$V_0 = 20\,m/sec$

18. (4)

Sol.

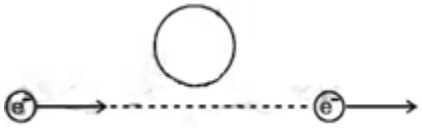
$U \longrightarrow Th + \alpha$

$KE_{Th} = \frac{P^2}{2m_{Th}}$, $KE_{\alpha} = \frac{P^2}{2m_{\alpha}}$

sinc m_{α} is less so KE_{α} will be mone

19. (2)

Sol.



When e- comes closer the induced current will be anticlockwise when e-comes farther induced current will b

20. (3)

Sol.

$\omega^2 A = \alpha$

$\omega A = \beta$

$$\Rightarrow \quad \omega = \frac{\alpha}{\beta}$$

$$\Rightarrow T = \frac{2\pi}{\omega} = \frac{2\pi\beta}{\alpha}$$

21. (4)

Sol.

$$\frac{I_1}{I_2} = \frac{25}{1} \Rightarrow \frac{A_1}{A_2} = \frac{5}{1}$$

$$\frac{A_{max}}{A_{min}} = \frac{5+1}{5-1} = \frac{6}{4} = \frac{3}{2}$$

$$\frac{I_{max}}{I_{min}} = \left(\frac{3}{2}\right)^2 = \frac{9}{4}$$

22. (1)

Sol.

$V = 6xy - y + 24z$

$$\vec{E} = \left(\frac{\partial V}{\partial x}\hat{i} + \frac{\partial V}{\partial y}\hat{j} + \frac{\partial V}{\partial z}\hat{k}\right)$$

$$\vec{E} = \left[(6y)\hat{i} + (6x - 1 + 2z)\hat{j} + (2y)\hat{k}\right]$$

$$\left|\vec{E}\right| = -(6\hat{i} + 5\hat{j} + 2\hat{k})$$

23. (1)

Sol.

Attraction between the plates

$$F = \frac{q^2}{2A\varepsilon_0} \text{ where } q = CV \text{ and } C = \frac{\varepsilon_0 A}{d}$$

$$F = \frac{C^2V^2}{2Cd} = \frac{CV^2}{2d}$$

24. (1)

Sol.

$$\mu_s = \tan 30^\circ = \frac{1}{\sqrt{3}} = 0.5$$

$$\mu_s = 0.57 = 0.6$$

$$S = ut + \frac{1}{2} a t^2$$

$$4 = \frac{1}{2} a(4)^2 \Rightarrow a = \frac{1}{2} = 0.5$$

$$a = g\sin\theta - \mu_k (g)\cos\theta$$

$$\Rightarrow \mu_K = \frac{0.9}{\sqrt{3}} = 0.5$$

25. (3)

Sol.

$$\frac{1}{\lambda_1} = R_e\left(\frac{1}{1^2} - \frac{1}{2^2}\right)$$

$$\frac{1}{\lambda_2} = R_e\left(\frac{1}{2^2} - \frac{1}{3^2}\right)$$

$$\frac{\lambda_1}{\lambda_2} = \frac{5}{27}$$

26. (4)

Sol.

$$\text{Current} = \frac{(3.5 - 0.5)}{100} A$$

$$= \frac{3}{100} A = 30mA$$

27. (3)

Sol.

The gravitation force on the satellite will be aiming toward the centre of earth so acceleration of the satellite will also be aiming toward the centre of earth

28. (4)

Sol.

If If $\vec{L}$ = constant then $\vec{\tau} = 0$

so $\vec{r} \times \vec{F} = 0 \Rightarrow \vec{F}$ should be parallel to $\vec{r}$ so coefficient should be in same ratio.So $\frac{\alpha}{2} = \frac{3}{-6} = \frac{6}{-12}$

So $\alpha = -1$

29. (1)

Sol.

$$K = \text{potential gradient} = \left(\frac{E_0 r}{r + r_1}\right)\frac{1}{L}$$

$$\text{so } E = K\ell = \frac{E_0 r \ell}{(r + r_1)L}$$

30. (4)

Sol.

No. of mole of gas = 1 so molar mass = 4g/mole

$$V = \sqrt{\frac{\gamma RT}{m}} \quad \Rightarrow 952 \times 952 = \frac{\gamma \times 3.3 \times 273}{4 \times 10^{-3}} \qquad \Rightarrow \gamma = 1.6 = \frac{16}{10} = \frac{8}{5}$$

$$\gamma = \frac{C_P}{C_V} = \frac{8}{5} \quad \text{os } C_P = \frac{8 \times 5}{5} = 8 jk^{-1}mole^{-1}$$

31. (4)

Sol.

$$F_C = \frac{mv_1^2}{r} = \frac{2mv_2^2}{(r/2)} = \frac{4mv_2^2}{r}$$

$$\text{so } v_1 = 2v_2$$

32. (4)

Sol.

$$V_0 = \sqrt{\frac{GM}{r}} = \sqrt{\frac{GM}{R^2}.\frac{R^2}{r}}$$

$$= \sqrt{\frac{9.8 \times 6.38 \times 6.38}{6.63 \times 10^6}} = \sqrt{60 \times 10^6} m/sec$$

$$= 7.76 \text{ km/sec}$$

33. (3)

Sol.

Fundametal frequency = highest commo factor = 105Hz

34. (4)

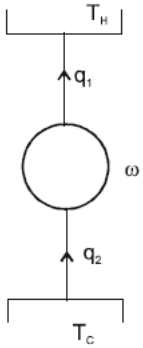
Sol.

$$\text{cop} = \frac{q_1}{w} = \frac{q_2}{q_1 - q_2} = \frac{T_C}{T_H - T_C} = 5$$

$$T_C = 5T_H - 5T_C$$

$$6T_C = 5T_H$$

$$T_H = \frac{6}{5} \times 253k = 303.6 \text{ k} = 30.6°C = 31°C$$



35. (1)

Sol.

Water will not overflow but will change its radius of curvature.

36. (1)

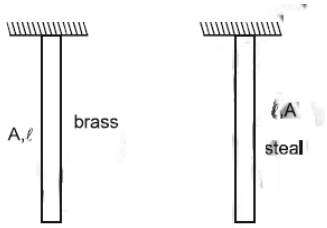
Sol.

$$P_A = \frac{\rho_A M_A}{RT}\ ,\ P_B = \frac{\rho_B M_B}{RT} = \frac{3}{2} \Rightarrow \frac{P_A}{P_B} = \frac{\rho_A}{\rho_B}\frac{M_A}{M_B} = 2\frac{M_A}{M_B} = \frac{3}{2}$$

$$\text{so,} \qquad \frac{M_A}{M_B} = \frac{3}{4}$$

37. (1)

Sol.



$$Y = \frac{W}{A}.\frac{\ell}{\Delta\ell}$$

$$SO\,\Delta\ell = \frac{W\ell}{AY}$$

$$\Delta e_1 = \Delta e_2 \qquad \frac{W_1\ell}{AY_1} = \frac{W_2\ell}{AY_2}$$

$$\frac{W_1}{W_2} = \frac{Y_1}{Y_2} = 2$$

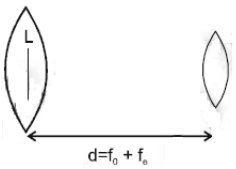
38. (3)

Sol.

CE amplifier causes phase difference of $\pi(=180^0)$ so $v_{out} = 300\,COS\left(15t + \frac{\pi}{3}\pi\right)$

39. (3)

Sol.



Magnification by yepiece

$$m = \frac{f}{f+u}$$

$$-\frac{I}{L} = \frac{f_e}{f_e + \left(-(f_0 + f_e)\right)} \Rightarrow \frac{I}{L} = \frac{f_e}{f_0}$$

$$m.p. = \frac{f_0}{f_e} = \frac{L}{I}$$

40. (4)

Sol.

$\text{power} = \bar{F}.\bar{V} = PA\bar{V} = \rho ghAV$

$= 13.6 \times 10^3 \times 10 \times 150 \times 10^{-3} \times 0.5 \times 10^{-3} / 60 \text{ watt} = \frac{102}{60}\text{watt} = 1.70\text{watt}$

41. (4)

Sol.

$V_C = \eta^x \rho^y r^z$

critical velocity is given by $V_C = \frac{R\eta}{2\rho r}$

so, x = 1

y = –1 z = –1

42. (4)

Sol.

$k_1 = \frac{hc}{\lambda} - \psi$ $k_2 = 3k_1 = \frac{2hc}{\lambda} - \psi = \frac{3hc}{\lambda} - 3\psi$

so $2\psi = \frac{hc}{\lambda}$ so $\psi = \frac{hc}{2\lambda}$

43. (1)

Sol.

Volume inflow rate = volume anflow rate

$\pi R^2 V = n\pi r^2 (v) \Rightarrow v = \frac{\pi R^2 V}{n\pi r^2} = \frac{VR^2}{nr^2}$

44. (2)

Sol. $\bar{A} = \cos wt\,\hat{i} + \sin wt\,\hat{j}$

$\bar{B} = \cos\frac{wt}{2}\hat{i} + \sin\frac{wt}{2}\hat{j}$

$\text{for } \bar{A}.\bar{B} = 0$

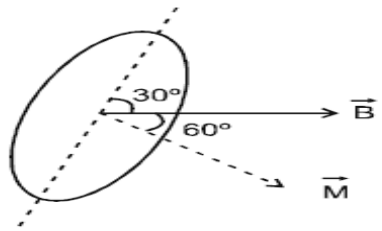
$\bar{A}.\bar{B} = 0 = \cos wt.\cos\frac{wt}{2} + \sin wt.\sin\frac{wt}{2}$

$= \cos\left(wt - \frac{wt}{2}\right) = \cos\left(\frac{wt}{2}\right)$

$\text{so}\frac{wt}{2} = \frac{\pi}{2} \Rightarrow t = \frac{\pi}{w}$

45. (1)

Sol.



$\bar{\tau} = \bar{M} \times \bar{B} = MB\sin 60°$

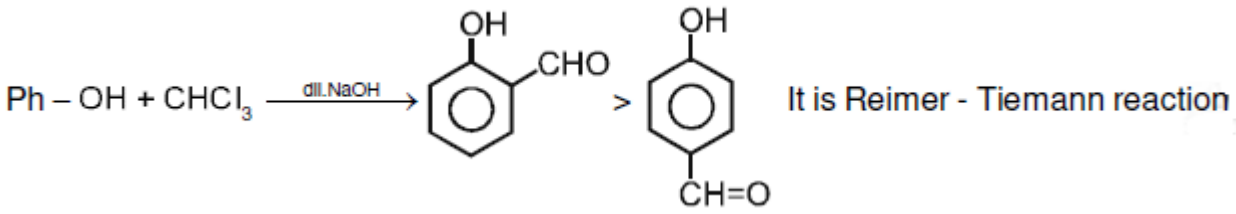
$= Ni\,AB\sin 60°$

$= 50 \times 2 \times 0.12 \times 0.1 \times 0.2 \times \frac{\sqrt{3}}{2}$

$= 12\sqrt{3} \times 10^{-2}\,\text{Nm} = 0.20784\,\text{Nm}$

46. (4)

Sol.



47. (1)

Sol.

$$K = \frac{[NO]^2}{[N_2][O_2]}$$

$$K' = \frac{NO}{[N_2]^{1/2}[O_2]^{1/2}}$$

$$\therefore K' = \sqrt{K}$$

48. (4)

Sol.

$$MgCO_3 \longrightarrow MgO + CO_2$$

84 g 40g

$\therefore$ 8g MgO will be from $\frac{84}{5}$g

$\therefore$ % Purity = $\frac{84}{5} \times \frac{100}{20} = 84\%$

49. (4)

Sol.

1 mole contains 6.02×10^{23} molecule

$\therefore$ 18 mole will contain $18 \times 6.02 \times 10^{23}$

50. (1)

51. (4)

Sol.

$$\text{Molality} = \frac{1000 \times n}{N \times M} \therefore 1 = \frac{1000 \times n}{N \times 18} = \frac{n}{N} = \frac{18}{1000}$$

$$\therefore \frac{n}{n+N} = \frac{18}{1018} = 0.0177$$

52. (4)

Sol.

It is zero order reaction $\therefore$ $6 \times 10^{-4} = \frac{\text{con.}}{20 \times 60}$

$\therefore$ conc. of B = 0.72M

53. (1)

Sol.

B.O. $O_2^+ > O_2 > O_2^- > O_2^{2-}$

2.5 2 1.5 1.0

54. (1)

Sol.

In basic medium rate of hydrolysis increases with electron with drawing group (-M effect predominates)

55. (3)

Sol.

$BeCO_3$ to $BaCO_3$ stability increases

56. (1)

Sol.

Stong acid with its salt can not form duffer solution.

57. (1)

Sol.

C.No. = 6

O.No. = +3

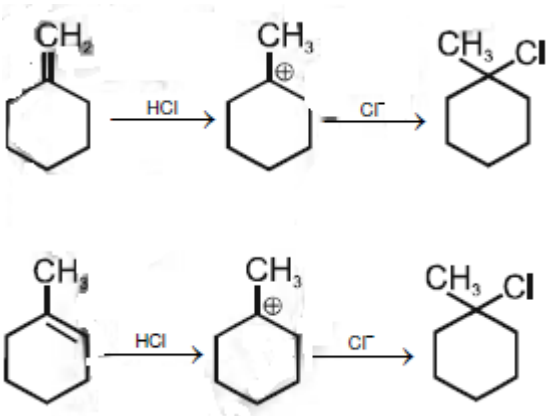
58. (4)

Sol.

OF_2 is oxygen difluoride.

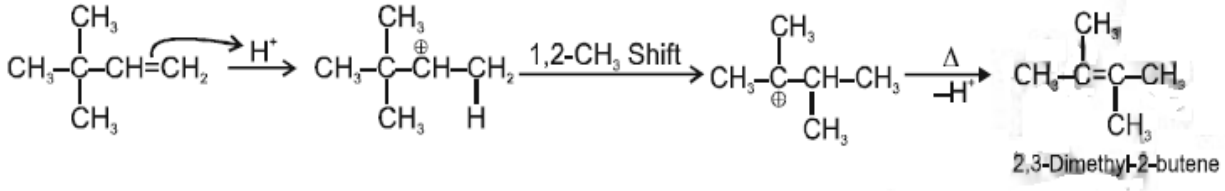
59. (3)

Sol.



60. (2)

Sol.



61. (4)
62. (3)
63. (2)
64. (2)
65. (1)

Sol.

Lucas reagent in I & IV while S_N1 in III

66. (4)
67. (1)
68. (4)

69. (1)

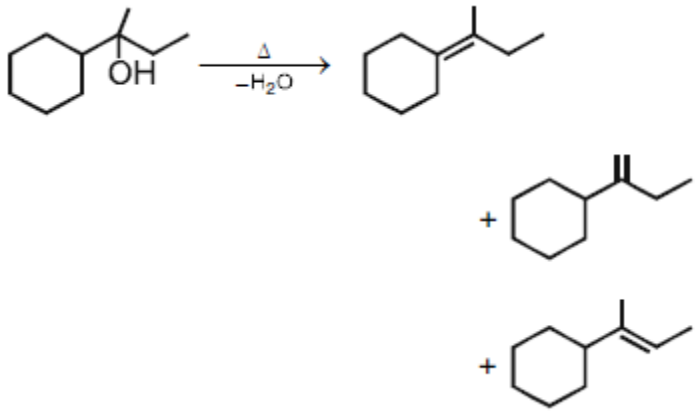
Sol.

Caprolactum is used for the manufacturing on Nylon-6

70. (1)
71. (3)
72. (3)

73. (2)

Sol.



74. (1)
75. (2)
76. (1)
77. (1)

78. (1)

Sol.

Structure isomers of C_3H_9 are

$$CH_3-CH_2-CH_2-NH_2, CH_3-\underset{\displaystyle NH_2}{\underset{|}{CH}}-CH_3, CH_3-NH-CH_2-CH_3, CH_3-\underset{\displaystyle CH_3}{\underset{|}{N}}-CH_3 \quad \text{TOtal}=4$$

79. (1)
80. (3)
81. (4)
82. (2)

Sol. Inversion product will be more than retention product due to close ion pair formation.

83. (4)
84. (1)

85. (2)
86. (2)
87. (2)
Sol.

With Ammonia derivation carbonyl compounds give addition followed by elimination reaction. Sligtly acidic medium will generate a nucleophilic centre for weak base like ammonia derivatives.

88. (4)
Sol.

Chlorine of chlorobenzene is inert towards nucleophile, which is phthalimide ion.

89. (3)
90. (3)
91. In competitive inhibition substrate and inhibitor competes to bind with enzyme.

92. XI, Molecular basis of inheritance

93. XII NCERT Sexual reproduction in flowering plants

94. XI NCERT ,pg 283

95. XI NCERT ,pg 149

96. XI Morphology of flowering plants (Except guava and cucumber, all)

97. XI NCERT ,pg 102 , 3^{rd} para

98. IgA being most soluble antibody is found abundant in milk.

99. XI NCERT ,pg 324, 2^{nd} para

100. XI NCERT ,pg 285, 3^{rd} para

101. XI, Sexual reproduction in flowering plants

102. REN digest DNA at particular sites and hence used in genetic engineering.

103. Parapodia is found in annelids and radula is a rasping organ in molluscs.

104. XI, Cell cycle and cell division

105. XI, Transport in plants

106. XI, Biological classification

107. Photorecptors like rods and cones receive light energy and generate action potential.

108. XII NCERT ,pg 195

109. XI, Biological classification

110. XI NCERT ,pg 50

111. XII NCERT ,pg 50. Oestrogen is at its peak during ovulation

112. XI NCERT ,pg 312

113. XII Microbes in human welfare

114. XI NCERT ,pg 296

115. Antibodies are globular proteins present in abundance in serum.

116. XI, Biological classification

117. Sucrose is non reducing sugar as it does not have a free aldehyde or ketone group.

118. XII, Ecosystem

119. XI, photosynthesis in higher plants

120. XII, Reproduction in organism

121. XII, Principles of inheritance and variation

122. Whale being a mammal has 4 chambered heart with complete double circulation.

123. XI, Morphology of flowering plants

124. XI, Morphology of flowering plants

125. XII, Principles of inheritance and variation

126. Body heat is produced by muscles due to contraction.

127. XI NCERT ,pg 56, 1st para last line

128. XII Sexual reproduction in flowering plants

129. XI Anatomy of flowering plants

130. XI NCERT ,pg 336 1st para

131. XII NCERT ,pg 208 5th point

132. XII NCERT ,pg 168 2nd para

133. XII, Principles of inheritance and variation

134. XI NCERT ,pg 332 , 1st para

135. XII Ecosystem

136. XII NCERT ,pg 131 last para

137. XI NCERT ,pg 258 Premolars and last molars are absent in milk teeth.

138. XI, Morphology of flowering plants

139. Cockroach is uricotelic.

140. XI NCERT ,pg 151 ,2nd para

141. XI NCERT ,pg 338,

142. XI Biological classification + Plant kingdom

143. Ectopic pregnancies are referred to as Implantation of embryo at site other than uterus

144. XII Ecosystem

145. Influenza- viral, Blastomycosis- fungal , Syphills -Bacterial

146. XII Organism and population

147. XII Molecular basis of inheritance

148. XII Principles of Inheritance and variation

149. XI NCERT ,pg 266

150. XII Ecosystem

151. XI Cell the unit of life

152. XII NCERT ,pg 131 , 1st para

153. XI Anatomy of flowering plants

154. XI NCERT ,pg 294 , 3rd para

155. XII Strategies for enhancement in food production

156. XII organism and population

157. XI biological classification

158. XI Morphology of flowering plants

159. XII NCERT ,pg 64 , 3rd para

160. Anterior ie ventral horns of spinal cord has motor neurons.

161. XI Mineral nutrition

162. XII Organism and population

163. XI NCERT ,pg 275, last line

164. XI Cell the unit of life (out of NCERT)

165. XI Cell the unit of life

166. XI Cell the unit of life

167. XI plant growth and development

168. XII NCERT ,pg 49

169. XI Cell the unit of life + XII molecular basis of inheritance

170. XI Biological classification

171. XII Sexual reproduction of flowering plants

172. XII Morphology of flowering plants

173. XI Biological classification

174. Graft rejection is due to Tk cells.

175. Porifera

176. XI Biological classification

177. XI Biological classification

178. Sperm provides centrioles during fertilisation

179. XII Environmental Issues

180. Nucleases are found in pancreatic juice.